REMARKS

This amendment is submitted in response to the office action mailed December 27, 2007. Claims 1-10 and 12- 66 are currently pending. Independent claim 1, 17, 32 and 46-50 have been amended to highlight further distinguishing features, for readability, to use preferential language, and/or clarify that recited functional elements are positively recited. Claims 4, 6, 21 and 35 have been amended for readability and/or to use preferential language. New claims 51-66 have been added to round out the scope of protection sought, support for which may be found at least in paragraphs 0023, 0037 and 0045 of published application, for example. Claims 4, 6, 21 and 35 have been amended for readability and/or to use preferential language. Reconsideration is respectfully requested.

Claim Objections

The Office Action includes an objection to claim 6. Claim 6 has been amended as suggested by the Examiner, and withdrawal of the objection is respectfully requested.

Art Rejections

Claims 1-3, 5-17, and 19-31 and 32-50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USP 5,978,381 ("Perlman") in view of U.S. Appln. Pub. No. 2002/0095228 ("Corts"), and further in view of USP 6,529,949 ("Getsin"). Claims 4 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of Corts and Getsin and further in view of USP 6,266,774 ("Sampath"). Independent claim 1, 17, 32 and 46-50 have been amended to recite further distinguishing features to expedite prosecution, and Applicant respectfully submits that claims 1-10 and 12-66 are patentable over the applied references.

Claim 1 as amended recites a system for dynamic scheduling of broadcast digital data content to client devices of users, said digital data content available from one or more sources, and said scheduling based on type of data and activity of said system. The system comprise a digital radio broadcast system comprising one or more gateways, said one or more gateways receiving one or more selections of digital data content and processing said digital data content for digital radio broadcast transmission. The one or more gateways comprise a scheduler for receiving said data content, said scheduler separating said received data content into a first data type and a second data type; said scheduler scheduling said first data type to

be broadcast via digital radio broadcast transmission to said client devices during selective first broadcast periods; said scheduler scheduling said second data type to be broadcast via digital radio broadcast transmission to said client devices during selective second broadcast periods; said data content scheduled for use during a scheduled time period after a recombination of said broadcasted first data type and second data type at said client devices; said gateway processing information for digital radio broadcast transmission to the client devices for enabling and disabling a deactivate flag for the first data type such that the first data type will be stored at said client devices, but not activated for immediate use until after said recombination, said gateway processing said first data type and said second data type for digital radio broadcast transmission to client devices *without any communication from a user requesting said data content.*

In contrast, even if hypothetically combined as suggested by the Office, the applied references would not yield the combination of features recited in claim 1. The system recited in claim 1 is vastly different from the system described in Perlman. In particular, according to claim 1, the first data type and said second data type are processed for digital radio broadcast transmission to client devices *without any communication from a user requesting said data content.* As noted at paragraphs 0008 and 0023 of the publication of the present application, for example, the user of a digital radio broadcast receiver can receive digital signals that are broadcast over radio waves and that are accessible by a wide population of digital radio broadcast receivers, such as iBOC enabled receivers. The users of digital radio broadcast receivers need not submit communications requesting the content that they wish to receive (via digital radio broadcast transmission) – they can simply tune into a radio station. As noted at paragraph 0005 of the present application, radio broadcast transmission of this type is a *push* technology since information is sent out regardless of whether or not anyone is tuned in.

In contrast, Perlman is directed to networked computer systems for communicating over the Internet wherein high bandwidth network content is downloaded on low bandwidth communications channels during off peak hours (see, e.g., col. 1, lines 5-52; col. 2, lines 7-25; col. 3, lines 1-6; col. 5, lines 21-27; and Figs. 1B and 2B). Perlman addresses the problem of limited bandwidth in the conventional communications infrastructure and the high cost of upgrading that infrastructure (see, e.g., col. 1, line 66 – col. 2, line 4).

The user's active request for content is central to Perlman's system. A user obtains content from a content server 210 (see Fig. 2B of Perlman) by connecting to the Internet or

online service via a computer device (col. 3, lines 1-6; col. 5, lines 39-52) and by clicking on a link to download content of interest (col. 5, lines 53-67). Perlman notes that, when carried out during peak usage hours, downloads can be very slow (col. 6, lines 1-24). Perlman observes that the Internet infrastructure is largely idle during off-peak hours, namely, late-night hours and early morning hours (col. 6, lines 25-31). Thus, Perlman discloses an approach whereby *client software on a client device 202* causes the client device 202 to automatically dial into a server (POP) 132 to download content *that the user has specified to be of interest* (col. 7, lines 1-14). Fundamentally, Perlman's system permits computer devices to download high bandwidth content during off-peak hours, wherein *the client computer device initiates* the requests for information.

Perlman further discloses a modification involving multicast protocols to avoid individual download requests by a multitude of client devices 202, to minimize traffic that might otherwise overwhelm a server (col. 10, lines 5-47). Specifically, Perlman states:

> *At a pre-established time, all client devices 202 desiring to be updated connect to the Internet. Each client device connects to a server* at a pre-established IP address and *downloads information* as to what data feeds are available, when they are available, the nature of the data, and the multicast addresses where the data can be accessed. . . . . *[C]lient device 202 software makes a determination* of which data feeds are most relevant for the user and contain new data which has not previously been downloaded. Then, at the appointed times client device 202 begins to [] receive the appropriate data streams. (Col. 10, lines 48-63, emphasis added.)

Thus, even in the multicast embodiment of Perlman, *software within the client device 202* connects to the Internet, actively seeks out information about data feeds, identifies what content is relevant to the user, and identifies what data feed source to receive content from, before ever receiving the data content.

Thus, the user's request for the content that is eventually received is central to Perlman's system.

In addition, the user's request for content remains central to the Office's hypothetical combination of Perlman, Corts and Getsin. In it's hypothetical combination, the Office notes that Perlman does not specifically disclose that the broadcast medium includes digital radio broadcast transmission and cites Corts for allegedly teaching digital radio broadcast for broadcasting content such as news or advertisements (Office Action at page 4). The Office Action asserts that the digital radio broadcast of Corts would have been an "advantageous addition" to the system disclosed by Perlman, although the Office Action is devoid of details

as to what that means. The Office Action also cites Getsin for allegedly disclosing delivering content to a user, preventing the user from accessing the content until after supplemental information is received and a scheduled time has arrived, and for enabling and disabling of the content without user instructions (Office Action at p. 5). The Office Action states that this aspect of Getsin would have been an advantageous addition to the combination of Perlman and Corts by allowing the content provider to control when "pre-fetched content" could be played back by the user.

In any event, the system of Getsin, like that of Perlman, relates to delivering content to a user via a network like the Internet (Abstract of Getsin) *in response to a user request.* This is evident from the Examiner's own characterization of Getsin in which the Examiner stated that Getsin would be an advantageous addition to the Perlman/Corts system by allowing the content provider to control when "*pre-fetched content*" could be played back by the user, i.e., the user has to "fetch" the content desired. This "user request" aspect of Getsin is further reflected in various sections of Getsin, for example:

> As such, the present invention has the ability to *allow users to download* a history and data associated with a particular synchronization event and play it later. (Getsin, Col. 13, lines 14-16, emphasis added.);
>
> FIG. 17 illustrates a logical sequence diagram 1700. As shown, when the *server receives a user request*, it analyzes the authentication information of the request (date/time, disc id, user id, and BCA number) and the appropriate synchronization event stored in the database. (Getsin, Col. 20, lines 5-9, emphasis added.);
>
> This locking and unlocking is accomplished through the transaction server 2102, which *validates the credentials of the user.* These *credentials 2110 are passed from the client 2112* (PC or set top box) and the server returns for example the unlock sequence 2114 to the client. (Getsin, Col. 28, lines 6-10, emphasis added.).

In contrast, according to claim 1, the first data type and said second data type are processed for digital radio broadcast transmission to client devices *without any communication from a user requesting said data content.* The user of the digital broadcast receiver does not need to communicate a selection of particular data content for transmission to the receiver, does not need to submit a "content request" and does not need to make any other request for content to be received by the receiver via digital radio broadcast

transmission. Thus, even if the Office's hypothetical combination were made, for the sake of argument, the result would not yield the combination of features claimed in claim 1. Withdrawal of the rejection and allowance of claim 1 is requested for at least these reasons.

Independent claims 17, 32 and 47-50 recite subject matter that is distinguishable over the applied references for reasons similar to those described above in connection with claim 1. In addition, claim 46 has been amended to recite that *all communications processed at said one or more client devices relating to said data content are push-type communications received by said one or more client devices via digital radio broadcast transmission*, which is in contrast to the subject matter of Perlman and Getsin which involve *pull-type* communications being sent *from the client device* to a content provide *to request content*. Thus, for at least these reasons, it is respectfully submitted that independent claims 1, 17, 32 and 46-40 are patentable over the applied references, and withdrawal of the rejections and allowance of these claims are respectfully requested.

The remaining dependent claims are allowable at least by virtue of dependency, and withdrawal of the rejections and allowance of the dependent claims are respectfully requested.

Moreover, it is believed that the rejection does not make out a *prima facie* case of obviousness. The rejection is simply devoid of sufficient details to establish a proper rejection. How would the system of Corts be implemented as an "advantageous addition" to the system of Perlman (Office Action at p. 4)? What exactly is being added, and how is it being used? What in Perlman's system is being hypothetically modified? What is the nature of the client devices in the hypothetically modified system that would receive information in this hypothetical hybrid environment? One is left to guess because the Office's rejection in this regard is devoid of sufficient details. The Office Action cites col. 4, lines 61-67 of Perlman for allegedly disclosing "numerous other network types" in alleging that the digital radio system of Corts would have been an advantageous addition to Perlman's system, but the Office Action provides no details. Likewise, this section of Perlman provides no such details either, other than acknowledging that the broadcast channels deliver information one-way, i.e., *from the content server to the client*. As noted in prior responses, the infrastructures for Perlman's Internet-based system and Corts' IBOC system are vastly different. Whereas Perlman's system employs a client-server model for Internet based communications that involves two-way communication between clients and servers over the conventional Internet, IBOC involves digital radio broadcast transmission over the air in which a receiver does not

send transmissions back to a transmitter at frequency range over which the receiver receives transmissions, and users of IBOC receivers need not submit any requests for content whatsoever. The Office has not sufficiently explained how Perlman would be modified by Corts and Getsin, nor how the hypothetically modified system would operate. Thus, it is respectfully submitted that the rejection is flawed and should be withdrawn for at least these additional reasons.

New Claims

New dependent claims 51-66 have been added herein to round out the scope of protection sought, and these claims are allowable at least by virtue of dependency.

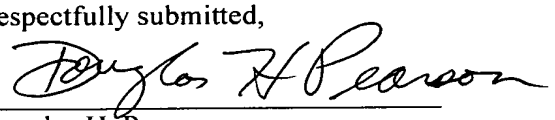
Request for Personal Interview

Should the Examiner disagree with Applicant's comments above and believe that the present claims are unpatentable over the currently applied references, the Examiner is respectfully requested to contact the undersigned before issuing another office action so that this matter can be discussed in a personal interview with the Examiner.

Conclusion

In light of the above amendments and remarks, the Applicant respectfully requests that the Examiner reconsider this application with a view towards allowance. The Examiner is urged to call the undersigned to resolve any issues that may remain.

Respectfully submitted,



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